

Table 31.1
Benign Brain Tumors

A Comparison of Benign/Borderline and Malignant Brain Tumors
Counts, Percents and Age-Adjusted Incidence Rates^a by WHO Histology Grouping, 2007-2011

WHO Histology Grouping	Benign/Borderline			Malignant		
	Count	Percent	Rate	Count	Percent	Rate
Brain						
Diffuse astrocytoma (protoplasm, fibrillary)	-	-	-	433	1.4%	0.1
Anaplastic astrocytoma	-	-	-	1,659	5.5%	0.4
Glioblastoma	-	-	-	13,808	45.6%	3.2
Pilocytic astrocytoma	-	-	-	1,213	4.0%	0.3
Unique astrocytoma variants	338	0.5%	0.1	141	0.5%	0.0
Oligodendrogloma	-	-	-	1,106	3.7%	0.3
Anaplastic oligodendrogloma	-	-	-	445	1.5%	0.1
Ependymoma/anaplastic ependymoma	-	-	-	593	2.0%	0.1
Ependymoma variants	-	-	-	-	-	-
Mixed glioma	-	-	-	847	2.8%	0.2
Astrocytoma, NOS	-	-	-	1,565	5.2%	0.4
Glioma, NOS	54	0.1%	0.0	1,598	5.3%	0.4
Choroid plexus	199	0.3%	0.0	36	0.1%	0.0
Neuroepithelial	-	-	-	76	0.3%	0.0
Neuronal/glial, neuronal and mixed	854	1.3%	0.2	66	0.2%	0.0
Embryonal/primitive/medulloblastoma	-	-	-	965	3.2%	0.2
Nerve sheath	271	0.4%	0.1	-	-	-
Meningioma	266	0.4%	0.1	-	-	-
Other mesenchymal	134	0.2%	0.0	67	0.2%	0.0
Hemangioma and hemangioblastoma	1,830	2.9%	0.4	-	-	-
Germ cell tumors, cysts, and heterotopias	77	0.1%	0.0	123	0.4%	0.0
Chordoma/chondrosarcoma	-	-	-	26	0.1%	0.0
Craniopharyngioma	104	0.2%	0.0	-	-	-
Neoplasm, unspecified	1,297	2.0%	0.3	1,300	4.3%	0.3
Other histologies ^b	17	0.0%	0.0	27	0.1%	0.0
Intracranial Meninges						
Neuroepithelial	-	-	-	-	-	-
Nerve sheath	-	-	-	-	-	-
Meningioma	31,892	50.4%	7.4	389	1.3%	0.1
Other mesenchymal	54	0.1%	0.0	33	0.1%	0.0
Hemangioma and hemangioblastoma	29	0.0%	0.0	-	-	-
Chordoma/chondrosarcoma	-	-	-	-	-	-
Neoplasm, unspecified	58	0.1%	0.0	-	-	-
Other histologies ^b	-	-	-	-	-	-
Cranial Nerves and Other CNS						
Glioblastoma	-	-	-	-	-	-
Pilocytic astrocytoma	-	-	-	61	0.2%	0.0
Astrocytoma, NOS	-	-	-	-	-	-
Glioma, NOS	-	-	-	207	0.7%	0.0
Neuronal/glial, neuronal and mixed	16	0.0%	0.0	-	-	-
Nerve sheath	6,378	10.1%	1.4	22	0.1%	0.0
Meningioma	26	0.0%	0.0	-	-	-
Other mesenchymal	-	-	-	-	-	-
Hemangioma and hemangioblastoma	20	0.0%	0.0	-	-	-
Germ cell tumors, cysts, and heterotopias	-	-	-	-	-	-
Chordoma/chondrosarcoma	-	-	-	-	-	-
Neoplasm, unspecified	37	0.1%	0.0	-	-	-
Other histologies ^b	-	-	-	-	-	-

Source: SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG).

^a Count and percent may not sum to total due to suppression and rounding.

Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

The histologic groupings exclude lymphomas, mesotheliomas, and Kaposi Sarcoma.

^b Includes histologies not included in current groupings.

- Statistic not shown due to fewer than 16 cases during the time period.

Table 31.1 - continued
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Counts, Percents and Age-Adjusted Incidence Rates^a by WHO Histology Grouping, 2007-2011

WHO Histology Grouping	Benign/Borderline			Malignant		
	Count	Percent	Rate	Count	Percent	Rate
Sellar Region						
Glioblastoma	-	-	-	-	-	-
Pilocytic astrocytoma	-	-	-	-	-	-
Ependymoma/anaplastic ependymoma	-	-	-	-	-	-
Glioma, NOS	-	-	-	-	-	-
Pineal parenchymal	87	0.1%	0.0	111	0.4%	0.0
Embryonal/primitive/medulloblastoma	-	-	-	17	0.1%	0.0
Nerve sheath	-	-	-	-	-	-
Meningioma	-	-	-	-	-	-
Other mesenchymal	-	-	-	-	-	-
Germ cell tumors, cysts, and heterotopias	-	-	-	190	0.6%	0.0
Chordoma/chondrosarcoma	-	-	-	-	-	-
Pituitary	15,134	23.9%	3.5	32	0.1%	0.0
Craniopharyngioma	680	1.1%	0.2	-	-	-
Neoplasm, unspecified	334	0.5%	0.1	31	0.1%	0.0
Other histologies ^b	-	-	-	-	-	-
Spinal Cord						
Diffuse astrocytoma (protoplasm, fibrillary)	-	-	-	-	-	-
Anaplastic astrocytoma	-	-	-	16	0.1%	0.0
Glioblastoma	-	-	-	37	0.1%	0.0
Pilocytic astrocytoma	-	-	-	65	0.2%	0.0
Unique astrocytoma variants	-	-	-	-	-	-
Ependymoma/anaplastic ependymoma	-	-	-	492	1.6%	0.1
Ependymoma variants	384	0.6%	0.1	-	-	-
Mixed glioma	-	-	-	-	-	-
Astrocytoma, NOS	-	-	-	85	0.3%	0.0
Glioma, NOS	-	-	-	22	0.1%	0.0
Neuronal/glial, neuronal and mixed	76	0.1%	0.0	20	0.1%	0.0
Embryonal/primitive/medulloblastoma	-	-	-	23	0.1%	0.0
Nerve sheath	633	1.0%	0.1	27	0.1%	0.0
Meningioma	27	0.0%	0.0	-	-	-
Other mesenchymal	54	0.1%	0.0	-	-	-
Hemangioma and hemangioblastoma	179	0.3%	0.0	-	-	-
Chordoma/chondrosarcoma	-	-	-	17	0.1%	0.0
Neoplasm, unspecified	67	0.1%	0.0	17	0.1%	0.0
Other histologies ^b	-	-	-	-	-	-
Spinal Meninges						
Ependymoma/anaplastic ependymoma	-	-	-	-	-	-
Neuronal/glial, neuronal and mixed	-	-	-	-	-	-
Nerve sheath	33	0.1%	0.0	-	-	-
Meningioma	1,429	2.3%	0.3	-	-	-
Other mesenchymal	20	0.0%	0.0	-	-	-
Hemangioma and hemangioblastoma	-	-	-	-	-	-
Neoplasm, unspecified	-	-	-	-	-	-
Other histologies ^b	-	-	-	-	-	-
Total	63,292	100.0%	14.6	30,249	100.0%	7.0

Source: SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG).

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